

Document Log Item

Addressing	
From	To
"Chan, Victor M." <VMChan@SolanoCounty.com>	Adam Freedman/R9/USEPA/US@EPA
CC	BCC
"Cliche, David W." <DWCliche@SolanoCounty.com> "Bell, Jeffery" <JBell@solanocounty.com> "Leland, James H." <JHLeland@SolanoCounty.com> "Laughlin, James W." <JWLaughlin@SolanoCounty.com> "Profant, Michael E." <MEProfant@SolanoCounty.com> "Kaltreider, Misty C." <MKaltreider@solanocounty.com> "Burton, Nicholas S." <NSBurton@SolanoCounty.com> "Schram, Stanley J." <SJSchram@SolanoCounty.com> R9-Deep	
Description	
Form Used: Memo	
Subject	Date/Time
RE: CO2 Injection Well - State Primacy	ÿ#i -v%#
# of Attachments	Total Bytes
0	17,241
NPM	Contributor
Processing	
Comments	

Body

Document Body

Thanks for your reply for bring more clarity to joint primacy. In reply to your question about potential conditions to our use permit:

I am still concerned about this project inducing an earthquake. The basis for my concern is the proximity of the Vaca-Kilby Hills fault which appears to be only 1 to 2 miles from the site. Shell Oil did not disclose the precise distance to me which raises a disclosure issue. I did overlay a California Geological fault map with the proposed project site map in order to estimate this 1 to 2 mile distance. The CO2 injection will expand underground but I do not know if the CO2 will reach the fault. Even if the CO2 does not cause a seismic event, you should be concerned about CO2 possibly migrating up the fault and contaminating the upper aquifers.

Shell Oil is trying to contact me since I am raising these issues. I do intend to ask the question to Shell Oil on the exact distance from the injection well to the Vaca-Kilby Hills fault. Please understand that if the fault distance is 15 to 20 miles away, I would not be raising this issue. 1 to 2 miles is a bit close to me. This raises another question for the EPA. Does the US EPA have a safe setback distance for a Class VI well from a geological fault? If a safe setback distance has not been developed yet due to a lack of data, then a seismic study is fully justified.

In your email, I noticed you may invoke some Financial Responsibility to the EPA permit. I am interested in the Financial Responsibility conditions of your permit because my questions are all about public safety and risk management. Please let us know if the US EPA has a safe setback distance from a geological fault and some advance details of the Financial Responsibility that you may have in your EPA permit.

Vic

From: Freedman.Adam@epamail.epa.gov [mailto:Freedman.Adam@epamail.epa.gov]
Sent: Wednesday, September 09, 2009 5:21 PM
To: Chan, Victor M.
Cc: Cliche, David W.; Bell, Jeffery; Leland, James H.; Laughlin, James W.; Profant, Michael E.; Kaltreider, Misty C.; Burton, Nicholas S.; Schram, Stanley J.; R9-Deep@epamail.epa.gov
Subject: Re: CO2 Injection Well - State Primacy

Victor,

Thank you for keeping me updated as to the proceedings of the Solano County Use Permit planning meetings. Could you provide some specifics concerning the "conditions" with the permit that you discussed this morning?

I am happy to provide you with the requested information.

The answer to your question concerning the State of California as a "joint primacy state" also applies to your question as to who is responsible for enforcement of EPA's permit conditions. California is regarded as having joint primacy because the state has primacy for Class II wells (oil & gas-related), while the federal EPA has direct implementation authority for all other classes of well (including Class V, under which the proposed Shell permit would fall). Therefore, U.S. EPA will be responsible for enforcing the permit conditions once it has been issued to Shell. As a note, California Division of Oil, Gas and Geothermal Resources (DOGGR) is the state authority in charge of enforcing and regulating Class II operations.

As to whether EPA will use proposed requirements for Geologic Sequestration of CO₂ (EPA 816-F-08-032), the answer is partially yes. Until the proposed Class VI regulations are finalized, EPA has some discretion as to which regulations are invoked during the process of writing the permit. Class I-Nonhazardous regulations will serve as an existing guideline, as Class I wells are deep, technically sophisticated wells that dispose of waste below the lowermost Underground Source of Drinking Water (USDW). The construction of Shell's proposed Class V wells are quite similar in nature to Class I wells, and Shell will thus be held to many of the same construction standards as Class I operators. We will also be considering some parts of the Class I-Hazardous regulations, especially as it pertains to Financial Responsibility. That said, EPA will certainly take Draft Class VI regulations into account as well, especially with regard to testing, monitoring, site characterization and injectate modeling. Since the proposed well will

operate under the authority of a Class V-Experimental permit, EPA has the flexibility to craft the permit requirements in a manner as appropriate and reasonable as possible, using whichever Class regulations it sees fit in order to most effectively protect USDWs.

When EPA has crafted its draft permit, I will ensure that you receive a copy of it. We only recently completed the Administrative Review of Shell's permit application. As the Technical Review proceeds, I will have more specifics for you about which requirements EPA will be including in the draft permit; We understand and share your desire to ensure that no conflicts exist between the permits so we hope that Solano County will be able to share their draft permit with us as well. In addition, all correspondence between EPA and Shell (and vice versa) will be shared with DOGGR, the California Regional Water Quality Control Board, as well as Solano County for the purpose of avoiding these conflicts as much as possible. We don't believe that duplication between permits will be an issue, though perhaps maintaining some consistency among the agencies with regard reporting and other requirements would be a good idea. We usually welcome any such cooperation. As one other note, if you are looking for some guidance as to what types of requirements will be included in Shell's proposed permit, please see the Final Permit and accompanying documents for "Arizona Public Services Draft UIC Class V Experimental Permit for Carbon Sequestration" on the following webpage: <http://www.epa.gov/region09/water/groundwater/uic-permits.html#apsVep>

If you have any follow-up questions, please feel free to be in touch.

Adam Freedman
Environmental Scientist, Underground Injection Control
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street (WTR-9)
San Francisco, CA 94105-3901
415.972.3845
freedman.adam@epa.gov

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Date: 09/09/2009 01:51 PM

Subject: CO2 Injection Well - State Primacy

Adam

We had a planning meeting on the CO2 Injection Well this morning. You should be aware that there may be some conditions with the SolanoCounty's Use Permit.

One issue that came up during today's meeting is about jurisdiction and enforcement on this relatively new program.

According to the EPA homepage on state primacy located at: <http://www.epa.gov/safewater/uic/primacy.html> The State of California is a "joint primacy state" for the UIC program which need clarification. I also have the following questions for the US EPA:

1. Once you issue your EPA permit, who is responsible for enforcement of the EPA's permit conditions? (i.e. will EPA enforce the permit conditions or is enforcement delegated to California?)
2. Will your EPA permit invoke the "proposed" EPA requirements for Geological Sequestration of CO₂ (EPA 816-F-08-032) that is now undergoing public review?
3. Can I get a DRAFT of your EPA permit? I would like to coordinate the EPA's requirements with the county requirements to ensure no conflict, avoid duplication and ensure completeness.

Victor M Chan, PE, BCEE
SolanoCountyCivil / Environmental Engineer
Board Certified Environmental Engineer www.aaee.net
707-784-3177